

CLAIMS

1. A cool air cooling device for optical disks having transfer means for transferring disk substrates in a standing state, wherein

the transfer means is provided with a plurality of feed screw shafts driven for synchronous rotation to support and place disk substrates at a plurality of points, and

the pitch of threads formed on the feed screw shaft differs according to axial positions of the threads.

2. A cool air cooling device for optical disks according to claim 1, wherein

the feed screw shaft has

a first region portion positioned at a carrying-in side of disk substrates and

a second region portion positioned at a side of carrying-out of disk substrates, and

a pitch of the threads formed on the first region portion is larger than a pitch of the threads formed on the second region portion.

3. A cool air cooling device for optical disks according to claim 2, wherein

an intermediate region portion whose pitch gradually decreases from the first region portion to the second region portion is provided between the first region portion and the second region portion.

4. A cool air cooling device for optical disks according to claim 2, wherein

the first region portion is longer than the second region portion.

5. A cool air cooling device for optical disks according to claim 1, further comprising

cool air blowing means for blowing cool air toward the disk substrates in the standing state from the above.

6. A cool air cooling device for optical disks according to claim 1, further comprising

an air conditioning chamber for covering the disk

substrates in a standing state, and cool air supplying means for supplying cool air to the air conditioning chamber.

7. A cool air cooling device for optical disks according to claim 1, wherein

the disk substrates are supported at three points, and one point of the three points is shared for supporting adjacent disk substrates.